CLEAN VERSION OF AMENDED SPECIFICATION

Page 2, lines 44 - 47 should read as follows:

D1 However, genetic studies on riboflavin synthesis by Ashbya gossypii (vitamin B2 synthesis) have shown that the URA3 gene from Saccharomyces cerevisiae or the pyrF gene from Escherichia coli are not capable of complementation of

Page 3, lines 4-15 read as should read as follows:

Attempts have therefore been made, because that gene from 5 Ashbya gossypii corresponding to the URA3 gene or pyrF gene is unknown, to clone it. Attempts at cloning the Ashbya gene by the methods described in the literature via, for example, hybridization with URA3 gene fragments or via degenerate oligonucleotides based on D2 conserved amino-acid sequences of various orotidine-5'-phosphate decarboxylases and screening a cDNA library using these oligonucleotides and the PCR technique were unsuccessful (Bergkamp et al. Yeast, Vol. 9, 1993: 677 - 681, Piredda et al., Yeast, Vol .10, 1994: 1601- 1612, Benito et al., Gene, Vol. 116, 1992: 59- 67 and Diaz-Minguez et al., Mol. Gen. Genet., Vol. 224, 1990: 269 -278).

Page 3, lines 22-28 should read as follows:

We have found that this object is achieved by the novel orotidine-5'-phosphate D3 decarboxylase gene having the sequence SEQ ID NO: 1 or its homologs which have at least 80% homology with the sequence SEQ ID NO: 1.

Brief Description of Drawings

D16

FIG. 1 is a pictorial depiction of the XhoI-SphI fragment of the construct ura 3::G418.

Page 4, lines 19-22 should read as follows:

Derivatives also mean variants whose nucleotide sequence in the region from -1 to -200 in front of the start codon have been modified so as to alter, preferably increase, gene expression and/or protein expression.

D4

Page 4, lines 31-47 should read as follows

The novel gene construct means the URA3 gene sequences SEQ ID No.1 and its homologs which have been functionally linked to one or more regulatory signals, advantageously to increase gene expression. Examples of these regulatory sequences are sequences to which inducers or repressors bind and thus regulate the expression of the nucleic acid. In addition to these novel regulatory sequences, the natural regulation of these sequences in front of the actual structural genes can still be present and, where appropriate, have been genetically modified so that the natural regulation has been switched off and the expression of the genes has been increased. The gene construct can, however, also have a simpler structure, that is to say no additional regulatory signals have been inserted in front of the sequence SEQ ID No.1 or its

D5

homologs, and the natural promoter with its regulation has not been deleted. Instead, the natural regulatory sequence has been mutated so that regulation no longer takes place, and gene expression is enhanced. The gene construct may

Page 6, lines 34-41 should read as follows:

These regulatory sequences are intended to make specific expression of the genes and protein expression possible. This may mean, depending on the host organism, for example that the gene is expressed or overexpressed only after induction, or that it is immediately expressed and/or overexpressed.

Page 7, lines 31-43 should read as follows:

The invention further relates to a process for inserting DNA into organisms, which comprises inserting into an organism, preferably a microorganism, which is deficient in an orotidine-5'-phosphate decarboxylase gene (= URA3 gene) a vector which comprises an intact URA3 gene having the sequence SEQ ID NO:1 or its homologs, advantageously together with further DNA, preferably with at least one other gene, and cultivating this organism on or in a culture medium which contains no uracil. Only these organisms which have acquired the vector are able to grow in this medium. A linear DNA is preferably used as vector in this process. The microorganisms preferably used in this process are fungi, especially of the family Metschnikowiaceae such as Eremothecium, Ashbya or Nematosprora , particularly preferably microorganisms of the genus Ashbya.

Page 8, lines 8-11 should read as follows:

D8 The novel URA3 gene having the sequence SEQ ID NO: 1 or its homologs can advantageously be used as selection markers in the novel process. It is possible and preferred to insert genes using these selection marker genes into Ashbya gossypii.

Page 9, lines 7-18 should read as follows:

D9 Genomic DNA from Ashbya gossypii ATCC10895 was prepared by the process described in WO97/03208. The genomic gene bank derived from this DNA was constructed in pRS314 and in YEp351 (Hill et al., Yeast, Vol. 2, 1986: 163-167) by the method described in Sambrook, J. et al. (1989) Molecular cloning: A laboratory manual, Cold Spring Harbor Laboratory Press or in F.M. et al. (1994) Current protocol in molecular biology, John Wiley and Sons. As can be inferred from, for example, WO97/03208, other plasmids, such as plasmids of the pRS series (Sikorski and Hieter, Genetics, 1989: 19-27) or cosmids such, as, for example, SuperCos1 (Stratagene, La Jolla , USA), are also suitable for producing the gene bank.

Page 10, lines 40-41 should read as follows:

D10 Degenerate olgonucleotides were synthesized on the basis of this information.

Page 12, lines 39-46 should read as follows:

Disruption of a gene means destruction of the functionality of a ~~gnomic~~ genomic copy of the gene either by (a) deleting part of the gene sequence or by (b) of the interrupting the gene by introducing a piece of foreign ~~FAN~~ DNA into the gene or by (c) replacing part of the gene by foreign DNA. Any foreign DNA can be used, but it is preferably a gene which effects resistance to any

Page 13, lines 4-12 should read as follows:

To disrupt the AgURA3 gene of ashbya gossypii ATCC10895, the kananycin resistance gene from Tn903, which is under the control of the TEF promoter of Ashbya gossypii (see Yeast 10, pages 1793-1808, 1994 or WO92/00379), was used. The gene is flanked 5' and 3' by several cleavage sites for restriction endonucleases, so that it was possible to construct a cassette which makes possible any desired constructions of gene disruptions using conventional methods of *in vitro* DNA manipulation.

Page 13, lines 35-43 should read as follow:

Resulting G418-resistant clones were examined by conventional methods of ~~PCT~~ PCR and Southern blot analysis (Sambrook, J. et al. (1989) Molecular cloning: A laboratory manual, Cold Spring Harbor Laboratory Press and in F.M. et al. (1994) Current protocols in molecular biology, John Wiley and Sons) to find whether the ~~gnomic~~ genomic copy of AgURA3 gene was in fact destroyed. Clones whose AgURA3 gene was destroyed are uracil-~~autotrophic~~ auxotrophic and resistant to 1 mg/ml 5'-fluoroorotic acid (FOA).